## ABSTRACT

Pd )

In a manufacturing process of a semiconductor integrated circuit device having an inlaid interconnect structure by embedding a conductor film in a recess 4 such as trench or hole formed in an organic insulating film 2 which constitutes an interlevel dielectric film and includes an organosiloxane as a main component, the recess 4 such as trench or hole is formed by subjecting the organic insulating film 2 to plasma dry etching in a CF-based gas/ $N_2$ /Ar gas in order to suppress the formation of an abnormal shape on the bottom of the recess 4, upon formation of a photoresist film 3 over the organic insulating film 2, followed by formation of the recess 4 therein with the photoresist film 3 as an etching mask.